

IN THE CLAIMS:

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1 (cancelled).

2 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is sandwiched between two workpieces.

3 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is provided in at least one of the workpieces.

4 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is provided on a substrate by molding the substrate in a mould with an insert formed by or including the radiation absorbing dye.

5 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is provided as a coating on a substrate.

6 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is provided by coextruding the material with a substrate.

7 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is exposed to radiation prior to positioning the

workpieces together.

8 (previously amended). A method according to claim 10, wherein the radiation absorbing dye is exposed to radiation through one of the workpieces.

9 (previously amended). A method according to claim 10, wherein the workpieces are made of plastics.

10 (previously amended). A method of forming a weld between workpieces over a joint region, the method comprising:

exposing the joint region to incident radiation having a wavelength outside the visible range so as to cause melting of the surface of one or both workpieces at the joint region, and allowing the melted material to cool thereby welding the workpieces together, the method further comprising providing a radiation absorbing dye at the joint region in one of the workpieces or between the workpieces which has an absorption band matched to the wavelength of the incident radiation so as to absorb the incident radiation and generate heat for the melting process, the radiation absorbing dye being visually transmissive after welding.

11 (previously amended). A method according to claim 10, wherein the lower limit of the absorption band is above 700nm.

12 (original). A method according to claim 11, wherein the absorption band defines the range 780-1100nm.

13 (previously amended). A method according to claim 10, wherein the absorption band defines the range 820-860nm.

14 (previously amended). A method according to claim 10, wherein the absorption band lies in the infrared range.

15 (previously amended). A method according to claim 10, wherein the absorption band does not include the range 400-700nm.

16 (previously amended). A method according to claim 10, wherein the radiation is in the infrared range.

17 (previously amended). A method according to claim 10, wherein the wavelength of the incident radiation lies in the range 700-2500nm.

18 (original). A method according to claim 17, wherein the wavelength of the incident radiation lies in the range 790-860nm.

19 (original). A method according to claim 17, wherein the wavelength of the incident radiation lies in the range 940-980nm.

20 (previously amended). A method according to claim 10, wherein the radiation is a laser beam.

21 (previously amended). A pair of workpieces which have been welded by a method according to claim 10.

22-25 (cancelled).

26 (previously amended). A method according to claim 10, wherein the workpieces comprise thin films.

27 (previously added). A method according to claim 9, wherein the workpieces are made of thermoplastic.

28 (cancelled).

29 (previously added). A method according to claim 9, wherein the workpieces are thermoplastic films.

C₁ 30 (currently amended). A method according to claim 20, wherein said thin films comprise polyester or ~~PEEK~~ fluoropolymer.

[31-61 (cancelled).